

alone. These results corresponded to an incremental cost-effectiveness ratio (ICER) equivalent to SR20,423 (US\$5,439) per life-year gained and SR21,857 (US\$5,821) per QALY gained. Sensitivity analyses showed these results to be robust under a range of plausible assumptions. **CONCLUSIONS:** Adjuvant treatment with trastuzumab in HER2+ early breast cancer was estimated to be a cost-effective treatment option over patients' lifetimes in Saudi Arabia, attributed to improvements in life expectancy and QALYs that translate into a high net benefit to the society.

PCN21

COST-EFFECTIVENESS OF LAPATINIB PLUS CAPECITABINE FOR WOMEN WITH HER2+ METASTATIC BREAST CANCER PREVIOUSLY TREATED WITH TRASTUZUMAB IN FINLAND

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OBJECTIVES: To evaluate the cost-effectiveness of lapatinib plus capecitabine (L + C) vs. currently used regimens in Finland for women with HER2+ metastatic breast cancer which has progressed following trastuzumab treatment. **METHODS:** A survival analysis model with a lifetime timeframe was used to calculate expected costs, Life Years (LYs), and Quality Adjusted Life Years (QALYs) for L + C vs. usual care in women with HER2+ MBC who have progressed following trastuzumab treatment. Usual care was represented as a weighted average of currently-used treatments in Finland, including continued trastuzumab-based therapy (50%) and single-agent chemotherapy (50%). The effectiveness of L + C and single-agent chemotherapy was based on data from a phase III randomized open label multi-centre trial comparing L + C with capecitabine alone in women with HER2+ MBC who had received prior treatment with an anthracycline, a taxane, and trastuzumab. Effectiveness of trastuzumab-based therapy was based on a pooled analysis of data from published studies. The analysis was performed from a societal perspective. Costs were obtained from official price-lists. Utilities were obtained from international publications. Costs and outcomes were discounted at 5%, consistent with Finnish guidelines. **RESULTS:** Compared with usual care, treatment with L + C yields an additional 0.216 LYs and 0.157 QALYs at an incremental cost of €8310. Cost-effectiveness of L + C vs. usual care is €38,481 per LY gained and €52,911 per QALY gained. The cost-effectiveness of L + C vs. usual care is sensitive to the proportion of usual care patients who receive continued trastuzumab vs. single-agent chemotherapy. Assuming there are 130 candidates for L + C in Finland each year, the budget impact of L + C is approximately €1M€ per year. **CONCLUSIONS:** For patients with HER2+ MBC who have progressed on trastuzumab, treatment with L + C meets an unmet clinical need and is cost-effective in this setting. IV administered treatment can cause over 12,000€ additional costs per year compared with oral formulations.

PCN22

AN ECONOMIC EVALUATION OF CAPECITABINE/CISPLATIN PLUS 5-FU/CISPLATIN REGIMENS IN TREATMENT OF ADVANCED GASTRIC CANCER IN SPAIN

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OBJECTIVES: A randomized phase III trial of Capecitabine/Cisplatin (XP) versus continuous infusion of 5-FU/Cisplatin (FP)

as first-line therapy in patients with advanced gastric cancer (AGC) met its primary endpoint of non-inferior progression-free survival (PFS). There was a trend toward superior efficacy with XP in terms of both PFS and response rates. An economic assessment was conducted in Spain to compare the costs of both therapies considered unit costs and medical resource consumption for year 2007. **METHODS:** Direct medical costs were estimated from the Spanish National Healthcare System perspective. The therapies costs were estimated based on the clinical trial results on actual dose and the number of administrations, and unit costs in different hospitals in Spain. The adverse event (AE) profiles were used to estimate the costs of treating AEs. An expert panel estimated treatment patterns and costs of treating major AEs. Indirect costs for time and travel for drug administration were also estimated. **RESULTS:** Annual pharmacologic cost in the XP arm were estimated to be €1333 greater than in the XP arm, but drug administration costs and AE costs were lower in the XP arm (€2575 and €27, respectively). Overall, direct and indirect medical costs were estimated at €2688 in the XP arm and at €4014 in the FP arm. According to budget impact results, 1.58 patients are likely to be treated with XP for each patient treated with FP. **CONCLUSIONS:** In Spain, oral capecitabine reduce the number and time spent in infusion visits, and would produce significant direct medical cost savings in the treatment of patients with AGC. Given the trend to superior efficacy, the estimate direct and indirect cost savings, and the convenience of oral treatment, XP treatment would be considered less costly than FP treatment for AGC from both a health care system and a societal perspective.

PCN23

COST EFFECTIVENESS OF CLODRONATE AND ZOLEDRONATE FOR THE TREATMENT OF METASTATIC BONE DISEASE IN BRAZIL: PUBLIC HEALTH PERSPECTIVE

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OBJECTIVES: Bone is the most common site for metastasis in cancer and bone metastases (BM) result in considerable morbidity and complex demands on health care resources. Bisphosphonates have been shown to treat and reduce skeletal-related events (SREs), which reduce quality-of-life and increase the risk of death. The aim of this study was to evaluate the cost-effectiveness of clodronate and zoledronate in the prevention of SREs in patients with BM. **METHODS:** We developed a Markov model to represent a cohort of patients diagnosed with BM in order to determine the cost-effectiveness of the studied therapeutic alternatives. The model has four health states: without SRE, with SRE (i.e., pathologic fracture, radiotherapy or surgery, and hypercalcemia), osteonecrosis and death. Transition probabilities came from SREs incidence rate meta-analysis previously performed by our group. Economical data were obtained from national databases. Univariate and multivariate sensibility analyses were used to determine the robustness of the pharmacoeconomic model. We used the public health perspective. Costs were presented in 2007 Brazilian Reais (1R\$ = 1.60US\$) **RESULTS:** BM treatment total cost in Brazil (on average, per patient) in five years (base case) was R\$46,313 with clodronate and R\$50,319 with zoledronate. Drug cost was the most influential item in the overall cost of BM treatment (>90%). In a five-year time-horizon, clodronate and zoledronate generated (on average, per patient) 2.00 and 1.90 QALYs, respectively. In this same time-horizon, clodronate and zoledronate also generated (on average, per patient) 1.81 and 1.76 SRE free-years, respectively. When we analyzed clodronate